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INERMIA VITTATA POEY.

In his *Memorias* (1861) Professor Poey described a dainty little fish from Cuba under the name of *Inermia vittata*. In the appendix to the same volume he referred the species to the genus *Emmelichthys* Richardson, an error in which he was followed by Jordan and Gilbert. No subsequent writer seems to have found the species. I have just received, however, from Dr. Jan Metzelaar of the Netherlands Bureau of Fisheries, a fine specimen from Curaçao. This shows that the genus has no close relation to the Emmelichthyidae (*Emmelichthys*; *Erythrocles* = *Erythrichthys*, preoccupied; and *Boxaodon*), this family being characterized by the very broad scaly maxillary, not covered by the preorbital sheath. In *Inermia* as in the closely allied East Indian genus, *Dipterygonotus* Bleeker, the maxillary is narrow, scaleless, and completely sheathed by the preorbital. The two genera may constitute a distinct family, Dipterygonotidae. This group is perhaps allied to the Mænidae, (*Maenas*, *Spicara*, *Centracanthus*) differing at least in the separation of the dorsals, in the terete body and in the less protactibility of the upper jaw.

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OBSERVATIONS ON YOUNG BLUEFISH

A series of 31 specimens of the Bluefish, *Pomatomus saltatrix*, taken in the pound nets at Young's Million Dollar Pier, Atlantic City, N. J., August, 1920, were found to be of the following sizes:

Total length, 14 cm. (1 example); 15 cm. (1); 16 cm. (2); 17 cm. (5); 18 cm. (8); 19 cm. (7); 20 cm. (3); 21 cm. (3); 24 cm. (1).

Apparently they were all of less than a year in age with the possible exception of the largest individual, which might have been a laggard from the spawning of 1919.

On examining the stomachs of these fish, it was

found that sixteen were empty. The remaining fifteen contained only remains of various small fish with traces of eel grass and sea-weed in three.

The following gives the food found, in volumetric percentages: *Poronotus triacanthus*, 13; *Leiostomus xanthurus*, 07; Fish, mangled remains, 66; Vegetable matter, 14.

The vegetable matter is given undue weight as two stomachs were empty except for slight traces of that substance and the only other individual containing it had taken but 5%, the remainder being fish.

Due to the fact that these specimens were taken in pound nets several constructions can be put on the analysis of their food.

Possibly the large percentage of empty stomachs was due to the fright of some while others went on feeding; or, possibly, the materials are not strictly representative, due to mere angry snapping in the general turmoil of the pound. On the other hand the fish might have entered the pound with their stomachs in the conditions found.

In one example, 19 cm. long, three tails of small butter-fish filled the stomach. This could be accounted for by the presence of many other fishes which would make the escape of the disabled *Poronotus* more likely. It is well known, however, that frequently the Bluefish in a state of nature will satisfy itself by this practice of merely taking the posterior part of a small fish.

It is possible that this is habitual with the species but it seems more likely to the writer that the more handy members of the large schools of fish on which this species usually preys diverts its attention from the individual originally attacked. In several cases, however, other portions of fish were present in a single stomach as well, which were no doubt the fore-parts of the same ill-fated Spot or Butterfish, whose hindquarters were swallowed first. The lack of any Menhaden (*Brevoortia tyrannus*) can not be accounted for as small examples were present in num-

bers equal to or greater than either of the other two species mentioned.

There appears to be a certain amount of correlation between the fullness of the stomach and the position in which the Bluefish relax in death. Arbitrarily three postures may be described; that is, with mouth closed or "normal"; with mouth wide agape; and with head thrown back and branchiostegals spread out around the throat as if gasping for breath.

In the case of those with the head thrown back 66+ % were turgid with food while of those whose mouths were shut 74+ % were entirely empty. The writer can not offer any explanation for the existence of such a correlation, but it hardly seems possible that this condition can be due to mere coincident.

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RATTLESNAKES AND SPITTING SNAKES

How the rattlesnake got his rattle has probably been solved. Given the common habit, which many snakes have of vibrating the tail-tip when excited, and the shedding of the horny outer skin, which all snakes often must do, then the intermediate steps leading to the rattle, are doubtless more or less correctly set forth by Garman. The terminal scales having developed a constriction are not lost when shed but hang to one another until after a number of castings. The result is a string of shed coverings of the terminal spine or button forming in the aggregate the rattle. This being agitated makes the familiar sound, half mechanical or metallic and also half cicada-like when heard at a short distance. So far so good. The rattle has come into being—a slow process, quickly visualized. Why has the rattle been produced? Surely not to warn away prey; no such altruism is conceivable. The rattler lies in wait and strikes the rabbits and birds on which it feeds, with-